8. External sufficient standard citation		
	•	
9. Is the level of risk associated with the issue(s) consi management performance goals assuming compliance wit		YES NO
(non-statutory) external standard?	If no continue; other	wise skip to 12
10. Is an internal standard required to attain a level of r	isk consistent with	
management performance goals?		YES NO
44 Describe values and status of internal sufficient states		
11. Describe nature and status of internal sufficient sta	indard.	
		:
12. Describe how the levels of risk and cost are consist Past adherance to the statutory requirements in #3 has resulted in leve		
with management goals including the use of industrial standards for inc		that are consistent
		<u>-</u>
13. Pick the basic implementing assumption from the list	☐ Major positive impact ☐ Mir	or negative impact
10. The the basic implementing assumption from the his	☐ Minor positive impact ☐ Ma	jor negative impact
	■ No net impact	
dd Danilla the nature and status of burning and		
14. Describe the nature and status of implementation i Experience has demonstrated that this program is both successful and		
Experience has demonstrated that this program is both successful and	u cost-enective.	

If yes, continue; otherwise skip to 10.

	Issue origin	Hazard analysis	☐ Identification Team
1. Issue(s)			
122. Other personnel hazards - ice/walking surfaces			
127. Other personnel hazards - slips, trips & falls			
131. Other personnel hazards - work on wet surface			
Focus group		☑ Occupational Salada	
☐ Environmental Protection ☐ Mana	gement & Oversig	tht Radiation Protect	otion
2. Is there a necessary standard which applies	to this issue?		X YES NO
•		f yes, continue; ot	
	•	i yes, continue, ot	Herwise skip to 6.
3. Necessary standard(s)			
•			
29 CFR 1910.22			
29 CFR 1926.25 29 CFR 1910.21			
29 CFR 1910.23 29 CFR 1910.23-30			
23 01 11 13 10.25 00			
			1
			1
4. Are there any aspects of these necessary sta			
	•	If yes, continue; o	therwise skip to 6.
5. Description of non-value added aspects of r	necessary stan	dard(s).	
,			
			<del></del>
6. Is the level of risk associated with the issue			¥ YES □ NO
performance goals assuming compliance with approximately	plicable neces	-	
		If no continue; ot	herwise skip to 12.
7 to there a non-required external standard white	ch annline to t	hie ieeuo?	DVEC DNO

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with	YES NO
management performance goals assuming compliance with the above (non-statutory) external standard?	continue; otherwise skip to 12
(non otalianory) external evaluation	continue; otherwise skip to 12
40 I was to be used and recognized to obtain a level of rick consistence	mēiāla
10. Is an internal standard required to attain a level of risk consiste management performance goals?	YES NO
11. Describe nature and status of internal sufficient standard.	
•	
12. Describe how the levels of risk and cost are consistent with ma	
Past adherance to the statutory requirements in #3 has resulted in levels of ES&H an with management goals including the use of industrial standards for industrial hazards	
with management goals including the use of industrial standards for industrial flazards	<b>5.</b>
·	
[parts a. a. ]	in a language of the second se
13. Pick the basic implementing assumption from the list. Major pos	sitive impact
☑ No net im	
14. Describe the nature and status of implementation including co	
Experience has demonstrated that this program is both successful and cost-effective	Э.
•	

1.	lssue(s)			ls	sue	origin	Hazard analysis	Identification Team
	. Other personal	hazards - liftir	g and carrying	heavy objects				
			, ,	, .,				
l								
ı	Focus group	☐ Emergency	/ Management	☐ Fire Protect	ction		☑ Occupational	Safety
	٠,					Oversigh	nt 🔲 Radiation Pro	tection
					-			
2.	Is there a ne	cessary star	idard which	applies to th	his is	sue?		YES NO
						lf	yes, continue;	otherwise skip to 6.
								-
3.	Necessary s	tandard(s)						
							·	
A	Are there en	, acresta ef	thana nasas	come standard	-d/-\	b ! - l-	do not add valu	- A TYPO PLUO
4.	Are there any	aspects of	mese neces	sary standar	ru(s)			e? YES NO otherwise skip to 6.
							yes, continue,	otherwise skip to 6.
5.	Description of	of non-value	added aspe	cts of neces	eearv	etand	ard(e)	
	2000		addon dopo.			Stand	u.u(3).	
								İ
_			•					
e .	le the level o	if rick accor	isted with th	a issuals) a	onel	stant	ith management	
							ary standards?	XYES NO
-		J	•	4- 4 <del>-</del>			-	otherwise skip to 12.
7.	Is there a no	n-required e	rternal stand	ard which a	nnlie	s to th	ie ieeus?	
				v u	- h		,	YES NO NO Notherwise skip to 10.

8. External sufficient standard citation	·
9. Is the level of risk associated with the issue(s) consistent with	☐ YES ☐ NO
management performance goals assuming compliance with the above (non-statutory) external standard? If no continue; other continue is a continue in the continue is a continue is	erwise skin to 12
in no community, said	ici wise skip to 12
10. Is an internal standard required to attain a level of risk consistent with	
10. Is an internal standard required to attain a level of risk consistent with management performance goals?	X YES INO
11. Describe nature and status of internal sufficient standard.	9 C atandarda
Fermilab ES&H Manual Chapter 5084, Ergonomic Protection, was prepared as a consequence of the N process. It formalizes the ongoing program of medical reviews, training, and work practice evaluations	as standards associated with this
issue.	
12. Describe how the levels of risk and cost are consistent with management per	formance goals.
Past adherance to the internal standard in #11 has resulted in levels of ES&H and cost performance the	nat are consistent with
management goals.	
•	
	•
13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor positive impact ☐	Minor negative impact
No net impact ☐	wajor negative impaci
14. Describe the nature and status of implementation including cost-effectivenes	ss.
The internal standards identified in #11 have proven to be both successful and cost-effective. When i	
N&S process, internal implementation programs may be modified to be compatible with this standard.	

	Issue(s)		Issue	origin	☐ Hazard analysis	★ Identification Team
1.				<del>-</del> · · · ·		
124	4. Other mechanic	al hazards - pinch points				
	- <del></del> ,					
	Focus group	☐ Emergency Management ☐ Fire P			○ Occupational :	
		☐ Environmental Protection ☐ Mana	gement &	Oversigi	nt LI Radiation Prot	ection
2.	Is there a ne	cessary standard which applies t	o this is	ssue?		X YES NO
				If	ves continue: c	therwise skip to 6.
					yes, continue, c	the wise skip to 6.
2	Necessary st	andard(s)				
3.						
	CFR 1910 Subpart					
29	CFR 1910 Subpart	Р				
				•		
					•	
4.	Are there any	aspects of these necessary sta	ndard(e)	which	do not add value	? YES NO
₹.	Are there any	aspects of these necessary star	iluai u(s)			
					i yes, commue;	otherwise skip to 6.
5.	Description o	f non-value added aspects of n	ecessary	/ stand	lard(s).	
1						
		•				
6.		f risk associated with the issue(				YES NO
pei	rformance goal	s assuming compliance with ap	plicable	neces	sary standards?	
					If no continue; o	therwise skip to 12.
					-	•
_						
7.	is there a no	n-required external standard whic	n applie			☐ YES ☐ NO
				lf	yes, continue; o	therwise skip to 10.

9. Is the level of risk associated with the issue(s) consistent with	ES NO
management performance goals assuming compliance with the above (non-statutory) external standard?	
(non-statutory) external standard? If no continue; otherwise	SKIP to 12.
10. Is an internal standard required to attain a level of risk consistent with	ES NO
management performance goals?	
11. Describe nature and status of internal sufficient standard.	
	1
	ŀ
12. Describe how the levels of risk and cost are consistent with management performance	e goals.
Past adherance to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that a	
with management goals including the use of industrial standards for industrial hazards. The associated program	n includes
with management goals including the use of industrial standards for industrial hazards. The associated progran proper guarding and clearences.	n includes
	n includes
proper guarding and clearences.	n includes
proper guarding and clearences.  13. Pick the basic implementing assumption from the list.  Major positive impact  Minor neg	n includes
proper guarding and clearences.  13. Pick the basic implementing assumption from the list.     Major positive impact   Minor neg   Minor positive impact   Major neg   Major positive impact   Major neg   Major n	n includes
proper guarding and clearences.  13. Pick the basic implementing assumption from the list.   Major positive impact   Minor neg	n includes
proper guarding and clearences.  13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor neg ☐ Minor positive impact ☐ Major neg ☐ No net impact ☐ Major neg ☐ No net impact ☐ Major neg	n includes
proper guarding and clearences.  13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor neg ☐ Minor positive impact ☐ Major neg ☐ No net impact ☐ Major neg	gative impact
proper guarding and clearences.  13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor neg ☐ Minor positive impact ☐ Major neg ☐ No net impact ☐ Major neg ☐ No net impact  14. Describe the nature and status of implementation including cost-effectiveness.  Adherence to machine guarding requirements has been well addressed at the Laboratory. Through an on-going verification all machines have been inspected, and guarded. Machines built and purchased prior to the current	gative impact gative impact
proper guarding and clearences.  13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor neg ☐ Minor positive impact ☐ Major neg ☐ Monor positive impact ☐ Major neg ☐ No net impact ☐ No net i	gative impact gative impact
proper guarding and clearences.  13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor neg ☐ Minor positive impact ☐ Major neg ☐ No net impact ☐ Major neg ☐ No net impact  14. Describe the nature and status of implementation including cost-effectiveness.  Adherence to machine guarding requirements has been well addressed at the Laboratory. Through an on-going verification all machines have been inspected, and guarded. Machines built and purchased prior to the current	gative impact gative impact

If yes, continue; otherwise skip to 10.

1.	Issue(s)		Issue	origin	Hazard analysis	☐ Identification Team
		hazards - repetitive motion				
İ						
	Focus group	☐ Emergency Management	☐ Fire Protection			Safety
		☐ Environmental Protection		Oversig		
_				_		
2.	Is there a ne	cessary standard which	applies to this is			YES NO
				11	yes, continue;	otherwise skip to 6.
3.	Necessary st	tandard(s)				
4.	Are there any	aspects of these nece	ssary standard(s)			
					ir yes, continue;	otherwise skip to 6.
5.	Description o	f non-value added asp	ects of necessary	y stanc	iard(s).	
	<u> </u>				,	
L						
6.		f risk associated with				¥YES □ NO
per	formance goal	s assuming compliance	with applicable	neces		
					If no continue;	otherwise skip to 12.
7	le there a re	n-required everyor ele-	dard which comit	)e to 4	hie ieeus?	RIVE FINE
7.	is lifere a NO	n-required external stan	uaru wincii appile	-3 IU [	nio iooue:	X YES INO

8. External sufficient standard citation	
ANSI Z365 (draft)	
O to the level of risk appointed with the incura(s) consistent with	
9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above	X YES INO
( tot tour's automorphism double	ontinue; otherwise skip to 12.
ii no ci	ontinue, otherwise skip to 12.
10. Is an internal standard required to attain a level of risk consistent	with XYES NO
management performance goals?	
11. Describe nature and status of internal sufficient standard.	
Fermilab ES&H Manual Chapter 5084, Ergonomic Protection, was prepared as a consequ	ence of the N&S standards
process. This standard is based on successful and cost-effective internal past practice	
standard cited in #8).	
	.
	1
12. Describe how the levels of risk and cost are consistent with mana	gement performance goals.
Past adherance to the practices in #11 has resulted in levels of ES&H and cost performa	nce that are consistent with
management goals.	
	i
	· .
13. Pick the basic implementing assumption from the list. Major positiv	e impact
Li Minor positiv	e impact
No net impac     No net impac	ot
14. Describe the nature and status of implementation including cost-	
Experience has demonstrated that this program is both successful and cost-effective. W	
approved in the N&S process, internal implementation programs may be modified to be co	ompatible with this standard.

☐ YES 🔀 NO

If yes, continue; otherwise skip to 10.

_	1 (2)		Issue	origin	🛮 Hazard analysis 🔲 lo	lentification Team
1.	Issue(s)					
129	. Other personr	el hazards - vacuum tanks				
l	•					
			<del></del>			
	Focus group	☐ Emergency Managemer	nt		☑ Occupational Safety	/
	•			Oversigi	ht Radiation Protection	
2.	is there a ne	ecessary standard which	h applies to this is	sue?		YES X NO
		•	• •		yes, continue; other	
					yes, continue, chier	wise skip to o.
3.	Necessary	standard(s)			•	
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4.	Are there an	y aspects of these nec	essary standard(s)			YES NO
					f yes, continue; other	rwise skip to 6.
5.	Description	of non-value added as	pects of necessary	/ stanc	lard(s).	
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<u> </u>					, , , , , , , , , , , , , , , , , , ,	
			•			
6.		of risk associated with				YES NO
per	formance go	als assuming compliand	ce with applicable	neces	-	· · · · · · · · · · · · · · · · · · ·
					If no continue; other	wise skip to 12.
7.	is there a n	on-required external sta	ndard which applie	s to t	his issue?	YES NO

8. External sufficient standard citation	
	·
9. Is the level of risk associated with the issue(s) consist	tent with
management performance goals assuming compliance with	the above
(non-statutory) external standard?	If no continue; otherwise skip to 12.
10. Is an internal standard required to attain a level of ris	ek consistent with
10. Is an internal standard required to attain a level of ris management performance goals?	X YES NO
aagee Ferrermance gener	
11. Describe nature and status of internal sufficient stan	
Fermilab ES&H Manual chapter 5033, Vacuum Vessel Safety, and a num	ber of Fermilab Technical Memos have been written
and in force for several years. These were written to specifically address	the vacuum hazards at Fermilab and to minimize
the potential risks.	·
	•
	·
and the state of the said and an analysis	and with an arrangement montaneous and a
12. Describe how the levels of risk and cost are consisted Past adherance to the internal standard in #11 has resulted in levels of E	SAH and cost performance that are consistent with
management goals.	tour faire cook portormance that are consistent with
, and a general general	
13. Pick the basic implementing assumption from the list.	☐ Major positive impact ☐ Minor negative impact
13. Fick the pasic implementing assumption from the list.	☐ Minor positive impact ☐ Major negative impact
	No net impact     ■     No net impact     ■     No net impact     ■     No net impact     ■     No net impact     No net impact
•	
14. Describe the nature and status of implementation in	cluding cost-effectiveness.
The internal standards identified in #11 have proven to be both success	sful and cost-effective.
	.

			Issue	origin	Hazard analysis □ I	dentification Team
1.	Issue(s)	l Al Al				
130	Other personal	hazards - vibration				
<u> </u>						
ı	Focus group	☐ Emergency Management ☐ Fi				
		☐ Environmental Protection ☐ M	anagement &	Oversigi	nt LI Hadiation Protection	<u> </u>
_				0		
2.	is there a ne	cessary standard which applie	es to this is			YES NO
				lf	yes, continue; other	wise skip to 6.
_	<b>M</b>	andoud(a)				
3.	Necessary s	andard(s)				
					•	
						,
L						
4.	Are there any	aspects of these necessary	standard(s)			YES NO
				ı	f yes, continue; othe	rwise skip to 6.
			_	_		
5.	Description o	f non-value added aspects o	of necessary	stand	lard(s).	
İ						
6.		f risk associated with the is:				VEC TINO
per		s assuming compliance with				X YES NO
					If no continue; other	wise skip to 12.
7.	Is there a no	n-required external standard v	which applie	s to th	nis issue?	YES NO
-	· · · · · · · · · · · · · · · · · · ·	•	· #= #= == ==		yes, continue; other	

8. External sufficient standard citation	
ACGIH TLV for hand-arm segmental vibration	
9. Is the level of risk associated with the issue(s) consistent with	
management performance goals assuming compliance with the above	☐ YES ☐ NO
and the second of the second o	; otherwise skip to 12.
	,
	•
10. Is an internal standard required to attain a level of risk consistent with	YES NO
management performance goals?	
11. Describe nature and status of internal sufficient standard.	
12. Describe how the levels of risk and cost are consistent with management	
Although there have been no recognized cases of vibration-related illness at Fermilab, exposures	
fairly commonplace. The ACGIH TLV was selected because it serves as the generally-recognize industrial hygiene hazards which do not have a statutory requirement. This meets the management	
lindustrial rivgierie fiazards which do not have a statutory requirement. This meets the manageme	sin periormance goal to use
·	
13. Pick the basic implementing assumption from the list. Major positive impac	t ☐ Minor negative impact t ☐ Major negative impact
No net impact	t ☐ Major negative impact
Ex TO NOT IMPLOT	
14. Describe the nature and status of implementation including cost-effective	reness.
In the opinion of the Fermilab subject-matter experts, compliance with the ACGIH TLV for vibration	
successful and cost-effective. The limits will be applied as guides in accordance with the cited s	
standard is approved in the N&S process, appropriate internal programs will be developed and im	
	· · · · · · · · · · · · · · · · · · ·

1.	Issue(s)	Issue origin Hazard analysis Identificatio	n Team
	· · · · · · · · · · · · · · · · · · ·	onnel hazards - working at heights	
132	. Other person	minor nazaras working at noights	Ī
1			
		·	1
<u> </u>			
	Focus group	p ☐ Emergency Management ☐ Fire Protection	
		☐ Environmental Protection ☐ Management & Oversight ☐ Radiation Protection	I
2.	Is there a i	necessary standard which applies to this issue?	□ NO
		If yes, continue; otherwise skip	) to 6.
3.	Necessary	standard(s)	
1	CFR 1926.104 CFR 1926.500-	•	
	OFR 1910 Subp		
	CFR 1910.252(I		
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4.	Are there a	any aspects of these necessary standard(s) which do not add value?	<b>⋈</b> NO
		lf yes, continue; otherwise ski	p to 6.
			-
5.	Description	n of non-value added aspects of necessary standard(s).	
			ł
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L			
6	le the level	el of risk associated with the issue(s) consistent with management	
6. ner		poals assuming compliance with applicable necessary standards?	□ NO
he,	ormanoe go		. +0. 10
		If no continue; otherwise skip	, to 12.
7.	Is there a r	non-required external standard which applies to this issue?	□ NO
		lf yes, continue; otherwise skip	to 10.

. External sufficient standard citation	,	
Is the level of risk associated with the issue(s) consistent with		☐ YES ☐ NO
nanagement performance goals assuming compliance with the abound in the aboundary and compliance with the aboundary.		otherwise skip to 1
• • • • • • • • • • • • • • • • • • •	110 00111111110,	omerwise skip to 1
0. Is an internal standard required to attain a level of risk consi	istent with	MYES MAG
anagement performance goals?		YES NO
1. Describe nature and status of internal sufficient standard.	•	
2. Describe how the levels of risk and cost are consistent with		
ast adherance to the statutory requirements in #3 has resulted in levels of ES&F ith management goals including the use of industrial standards for industrial haz		mance that are consisten
	•	
3. Pick the basic implementing assumption from the list. Major	positive impact	☐ Minor negative impac
☐ Minor	positive impact	☐ Major negative impac
☑ No ne	t impact	
4. Describe the nature and status of implementation including	cost-effective	ness.
xperience has demonstrated that this program is both successful and cost-effective		

1. Issue(s)	Issue d	origin	★ Hazard analysis	☐ Identification Team
133. Radiation - radioactive contamination 138. Radiation - radioactivated soil 141A. Radiation - residual contamination				
Focus group		versigh	☐ Occupational statement	
2. Is there a necessary standard which applies to	o this iss		yes, continue; o	▼YES □ NO otherwise skip to 6.
3. Necessary standard(s)				•
10 CFR 835.603 10 CFR 835.404 10 CFR 835.1101 10 CFR 835 Appendix D				
4. Are there any aspects of these necessary star	ndard(s) v			e? X YES NO Notherwise skip to 6.
5. Description of non-value added aspects of no	ecessary	stand	ard(s).	
The documentation requirements of 10 CFR 835.1101.(d) do not individual items released from Contamination Areas with contadition they result in the collection of the documentation in an aite-specific flexibility, can achieve a sufficient level of control exemption from Subpart 10 CFR 835.1101(d) should be submit documentation procedure.	mmensurat n unusable l in a more	te requi format. cost-e	rements for training a Other measures, ir ffective manner. A re	and recordkeeping. In in in in in in in in in in in in in in
	*****			
6. Is the level of risk associated with the issue(sperformance goals assuming compliance with app		necess	ary standards?	▼YES □ NO otherwise skip to 12.
7. Is there a non-required external standard whic	h applies			☐ YES ☐ NO ltherwise skip to 10.

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?  If no continue; other	YES NO
10. Is an internal standard required to attain a level of risk consistent with management performance goals?	YES NO
11. Describe nature and status of internal sufficient standard.	
12. Describe how the levels of risk and cost are consistent with management performs with the exemption as discussed above, implementation of the regulatory requirements provides a necessive of control of radioactive contamination in a manner consistent with general industry practice. The leconsistent with management performance goals because management expects to use industrial solution issues. This is an industrial issue and the solution chosen is an industrial solution.	ssary and sufficient evel of risk is
13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Ma ☐ Minor positive impact ☐ Ma☐ No net impact	nor negative impact ajor negative impact
14. Describe the nature and status of implementation including cost-effectiveness.	
Program implementation is in progress by means of the policies of the Fermilab Radiological Control Manu cost-effectiveness would be improved if the exemption request described concerning 10 CFR 835.1101 is the above standard is approved in the N&S process, internal implementation programs may be modified to with this standard.	approved. When

1.	lssue(s)						ls	sue	origin		🛮 Hazard analys	is D	d Identification	n Team
	1/142. Radiation	- specia	l nuclea	r materi	ials (SN	IM) and	nuclea	r mate	erials					
					(	,			511010					
						<u></u>								
	Focus group	☐ Em	ergency	Manage	ement	Fire	e Protec	ction		-	☐ Occupationa	l Sai	fetv	
	•								Oversig	ht	■ Radiation Pr	otect	ion	
2.	Is there a ne	ecessai	y stan	dard w	/hich	applies	s to th	is is	sue?				X YES	
									lf	f 'y	es, continue;	oth	erwise skip	to 6.
													•	
3.	Necessary s	tandar	d(s)											
Ato	mic Energy Act													
														i
						· · · · ·								
4.	Are there any	y aspe	cts of	these	neces	sary s	tandar	d(s)	which	d	o not add vale	ue?	☐ YES	NO N
											yes, continue;			
5.	Description o	of non	-value	added	aspe	cts of	neces	sary	stand	dar	rd(s).			
-	_								•					
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_			_			_			_	_	_			
6. per	is the level o formance goal	of risk Is acc	associ	ated w	vith th	le issu with	ie(s) c	onsis	stent w	vit	h management	t	☐ YES	NO N
P-01	.ormanoe goal	uod	y	շշուին	.4.100	*******	appiica	'DIC			=	oth-		
										"	no continue;	otne	SIWISE SKIP	ιο 12.
7	le there = ==	n_re	امور	tares!	aka:		blak -	17 -		- <del>-</del>				
7.	is there a noi	ın-requ	rea ex	ternai	stand	ard Wh	ni <b>ch a</b> p	plie				_41-	☐ YES	
									IT	у¢	es, continue; 🤈	otne	rwise skip	το 10.

8. External sufficient standard citation	
C. In the level of viels appointed with the inque(a) consistent with	
9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above	YES X NO
/ http://www.alabando	otherwise skip to 12.
	,
10. Is an internal standard required to attain a level of risk consistent with	
management performance goals?	YES NO
11. Describe nature and status of internal sufficient standard.	
Fermilab ES&H Section Specific Quality Implementation Plan (SQIP) RPS.8 constitutes an internal	standard on nuclear
material and special nuclear material based on DOE Orders 5633.3B, 5634.1B, 5632.1C, and 5660.	
12. Describe how the levels of risk and cost are consistent with management p SQIP RPS.8 provides requirements mostly equivalent to those required by the NRC as applied to ge	
level of risk is consistent with management performance goals because mananagement expects to	
for industrial issues and the level of cost and risk in this internal standard is consistent with that of it	
NRC.	
	i
•	
13. Pick the basic implementing assumption from the list.  Major positive impact	Minor negative impact
Minor positive impact	☐ Major negative impact
☑ No net impact	
14. Describe the nature and status of implementation including cost-effectiven	
Fermilab has implemented successful and cost-effective programs to assure acceptable performan and special nuclear materials.	ce in the area of nuclear
· · · · · · · · · · · · · · · · · · ·	

1.	Issue(s)				Issue	origin	Hazaı	rd analysis	☐ Identii	fication Team
	Radiation - mix	red waste								
	Radiation - rad									
										}
				<u> </u>						
F	ocus group	☐ Emergency Mai		☐ Fire Pro			Occ	upational	Safety	
		☐ Environmental	Protection	☐ Manage	ement &	Oversigi	ht 🔀 Rad	liation Prot	ection	
2.	le there a ne	ecessary standar	d which c	unnline te	thin in				_	
۷.	is there a ne	cessary stanuar	u which a	iphiles ro	unis is					YES NO
						IT	yes, co	ntinue; o	therwise	skip to 6.
3.	Necessary s	tandard(s)								
		or equivalent that m	ight receive	FNAL was	tes)	,				
	FR 260-270 AC 700-730 (also	o see hazardous wa	ste reas.)							
	•		<b>3,</b>							ĺ
L				<u> </u>						
4.	Are there an	aspects of the	sa naaass	ore otone	dord(o)	verbio b	da			VEO ELVO
٦.	Are there any	aspects of the	se necess	ary Stant	aaru(s)		•			YES NO Skip to 6.
						-	. ,00, 0	, , , , , , , , , , , , , , , , , , ,	Julio Wigo	3 KIP 10 0.
5.	Description of	of non-value add	led aspec	ts of ne	cessary	stand	ard(s).			
The	State of Washing	gton categorizes ma	iny forms of	waste as r	nixed wa	ste inco	nsistent w	ith the Res	ource Cor	servation
and I	Recovery Act (Recovery Act (Recovery)	CRA). This increas Administrative Code	es the cost (WAC)	significantly	y. Corre	ction of	this, howe	ver, would	require rev	ision of the
Olulo	or was migren	riammonan vo ood	, (VV/ C).							
									<u> </u>	
<b>6.</b>	le the level o	of risk associated	d with the	ieeuo(s)	. const	stont	ilth	naament		
perfe	ormance goal	s assuming con	npliance v	ಕ ಸಾಕಾರ್ಚ(೪) with appl	icable	necess	rıcıı manı sary star	agement idards?	× N	ES NO
	-	•	-				-		therwise	skip to 12.
								•	- <del>-</del>	,
<b>7</b> . l	s there a no	n-required exterr	nal standa	rd which	applies	s to th	is issue'	?		/ES □NO
										skip to 10.

B. External sufficient standard citation	
	•
. Is the level of risk associated with the issue(s) consistent anagement performance goals assuming compliance with	
non-statutory) external standard?	If no continue; otherwise skip to 1
	,
0. Is an internal standard required to attain a level of risk	c consistent with ☐ YES ☐ NO
nanagement performance goals?	<u> </u>
1. Describe nature and status of internal sufficient stand	lard.
2. Describe how the levels of risk and cost are consisten	t with management performance goals
he level of risk is consistent with performance goals except for the comm	ent noted regarding the problems posed by
rovisions of the WAC. The level of risk is consistent with management p o use industrial solutions for industrial issues. This is an industrial issue a	
. The is an industrial issues.	and the solution chosen is an industrial solution.
,	
3. Pick the basic implementing assumption from the list.	」Major positive impact □ Minor negative impac □ Minor positive impact □ Major negative impac
	No net impact
4. Describe the nature and status of implementation inc	luding cost-effectiveness
he program is implemented by means of the Fermilab ES&H Manual Chap	
control Manual, and the Fermilab Low Level Waste Certification Plan.	

				J.	ssue	origin		lysis 🔲 k	dentification Team
1.	Issue(s)								
136	. Radiation - pro	mpt radiation							
	Focus group	☐ Emergency	Management	☐ Fire Prote	ection		☐ Occupation	nal Safet	,
'	oous: group		ntal Protection			Oversig	ht 🛛 Radiation		
2.	Is there a ne	cessary stan	dard which	applies to t	his is	sue?			YES NO
						If	yes, continu	e; other	wise skip to 6.
3.	Necessary s		<del></del>						
	CFR 835.501-502 CFR 835.601-603			-					
```	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
							•		
<u> </u>								·	
_									
4.	Are there any	aspects of	these neces	sary standa	ırd(s)	•	do not add v		Wise skip to 6.
						•	n yes, contin	ue, ouiei	wise skip to 6.
5.	Description of	of non-value	added aspe	cts of nece	essarv	stand	dard(s).		
	FR 835.603(c) s							hr. This th	reshold adds no
valu	e in controlling w	orker dose equi	valent. It is to	o high, well ab	ove let	hal or no	ear-lethal levels.	A reque	st for an
									submitted. The ally standard signs
									sts are increased.
					_				
<u> </u>			···						
-									
6.							with managem		YES NO
per	formance goal	is assuming	compliance	with applic	cable	neces	-		
							ir no continu	e; otner	wise skip to 12.
_	I. Ma		-8 · 8 · ·		••	_ ,	<del>.</del>		
7.	Is there a no	n-required ex	cternal stanc	iard which a	applie			a othor	✓ YES ☐ NO Io.
						11	yes, conunu	e, omerv	יושכ שאוף נט וט.

8. External sufficient standard citation
9. Is the level of risk associated with the issue(s) consistent with
management performance goals assuming compliance with the above
(non-statutory) external standard?  If no continue; otherwise skip to 12
10. Is an internal standard required to attain a level of risk consistent with management performance goals? ☐ YES ☐ NO
11. Describe nature and status of internal sufficient standard.
,
12. Describe how the levels of risk and cost are consistent with management performance goals.
With the approval of the exemptions discussed above, the level of risk remaining upon implementation of the regulatory requirement is consistent with and sufficient to meet management goals. (Also see issue "Safety Analysis Documentation"
as it is related to prompt radiation issues.) The level of risk is consistent with management performance goals because
management expects to use industrial solutions for industrial issues. This is an industrial issue in that the regulations cited are essentially equivalent to the requirements imposed on general industry.
13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor negative impact ☐ Minor positive impact ☐ Major negative impact
No net impact
14. Describe the nature and status of implementation including cost-effectiveness.  This program is already implemented through Laboratory policies in the Fermilab Radiological Control Manual that also
reflect various guidance documents developed by the accelerator radiation protection community including SLAC-327
"Health Physics Manual of Good Practices for Accelerator Facilities" and DOE Order 5480.25 and its guidance.

If yes, continue; otherwise skip to 10.

1.	Issue(s)				issue	origin	Hazard analysis	Identification Team
	. Radiation - rad	dioactive sc	urcee					
137	, naulation - la	uloactive sc	Juices				•	
	Feene group	[ Emore	Joney Manage	ment  Fire	Protection		☐ Occupational	Cofety
	Focus group					Oversia	ht 🔀 Radiation Pro	
			illional Coo	JOLIOIT   INICI	agomon a	Overeign	nt Zariadiation i ro	icotion
						_		<u> </u>
2.	Is there a n	ecessary	standard w	hich applies	to this i	ssue?		YES X NO
						If	yes, continue;	otherwise skip to 6.
3.	Necessary	standard(	s)					
					<del>" ' . '</del>			
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l								[
<b>.</b>								:
	*		•					
		*						
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1								
			,					
4.	Are there an	v aspects	s of these i	necessarv s	tandard(s)	which	do not add valu	ıe? ☐ YES ☐ NO
		,,						otherwise skip to 6.
						-	<b>,</b> 500, 50111111100,	omerwie emp to or
_	Description	<b>af nan</b>					d===d(=)	
5.	Description	of non-va	aiue added	aspects of	necessar	y Stant	ara(s).	
								•
								`
Ь		-						
6.	is the level	of risk a	ssociated w	ith the issu	ıe(s) cons	istent v	with management	
							sary standards?	YES X NO
-	3		,		, T		-	otherwise skip to 12.
							-,	
_		_				_		
7.	is there a n	on-require	ed external	standard wh	nich appli	es to ti	nis issue?	☐ YES 🔀 NO

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above	YES NO
(non-statutory) external standard? If no continue; oti	nerwise skip to 12
	٠
10. Is an internal standard required to attain a level of risk consistent with management performance goals?	XYES NO
11. Describe nature and status of internal sufficient standard.	
Fermilab Radiological Control Manual Articles (FRCM) 365 and FRCM Chapter 4 Part 3 constitute an in These Fermilab policies are based on and are consistent with DOE N5400.9.	ternal standard.
12. Describe how the levels of risk and cost are consistent with management per	
The internal standard adequately protects against loss, damage, or unauthorized exposure due to rac Such a standard is needed to assure proper usage and control of radioactive sources in a research er	
large numbers of such sources are used in a variety of ways as part of the physics research program.	
40. Piele the feet in the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the seco	Minor pogativo impost
13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Minor positive impact ☐	Major negative impact
No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No	
44 Departing the matrice and status of implementation in the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of	_
14. Describe the nature and status of implementation including cost-effectivenes. The program has already been implemented by means of the cited portions of the Fermilab Radiological	
When the above standard is approved in the N&S process, internal implementation programs may be recompatible with this standard.	

1.	Issue(s)		Issue	origin 🛚	Hazard analysis	Identification Team
		ioactive liquids and gases	· · · · · · · · · · · · · · · · · · ·	· <u>-</u>		
		-				İ
ŀ						
	Focus group	☐ Emergency Management		]	Occupational Sa	fety
		☐ Environmental Protection	☐ Management &	Oversight	Radiation Protec	tion
2.	Is there a ne	cessary standard which	applies to this is	sue?		X YES NO
				If ye	s, continue; oth	erwise skip to 6.
3.	Necessary s	tandard/e\				
	OFR 835.209	tanaaru(ə)				
	OFR 835.603					
	CFR 835.1101					
100	CFR 835 Appendi	ces A- C				
l						
_		-				
4.	Are there any	aspects of these neces	ssary standard(s)	which do	not add value?	☑ YES ☐ NO
	-	•	- (,			herwise skip to 6.
5.	<u>-</u>	of non-value added aspe	ects of necessary	standard	(s).	
See	comment cited w	vith respect to # 133.			•	
				·		
		of risk associated with t				TI VEC MINO
peri	formance goal	s assuming compliance	with applicable	-		YES NO
				lf r	no continue; oth	erwise skip to 12.
7.	Is there a no	n-required external stand	dard which applie	s to this	issue?	YES NO
				If yes	, continue; oth	erwise skip to 10.

8. External sufficient standard citation	
	ļ
9. Is the level of risk associated with the issue(s) consistent with	ES X NO
management performance goals assuming compliance with the above	
(non-statutory) external standard? If no continue; otherwise	skip to 12.
10. Is an internal standard required to attain a level of risk consistent with	
management performance goals?	ES NO
44 Describe nature and status of internal sufficient standard	٠
11. Describe nature and status of internal sufficient standard.  Fermilab Radiological Control Manual Article 349 contains procedures needed to control radioactive liquids and	gases in
accelerator components. This constitutes an internal standard.	
	l
12. Describe how the levels of risk and cost are consistent with management performance	e anale
The regulation and the internal standard will adequately address the identified issue. The level of risk is consist	tent with
management performance goals because management expects to use industrial solutions for industrial issues. lindustrial issue and the solution chosen is an industrial solution.	This is an
industrial issue and the coldien chosen is an industrial coldien.	
•	
13. Pick the basic implementing assumption from the list. Major positive impact Minor neg	ative impact
☑ Millor positive impact    Major neg ☑ No net impact	jauve impaci
14. Describe the nature and status of implementation including cost-effectiveness.	
The program is presently implemented as set forth in the Fermilab Radiological Control Manual. When the above approved in the N&S process, internal implementation programs may be modified to be compatible with this stan	
, , , , , , , , , , , , , , , , , , , ,	

Issue of	rigin ☑ Hazard analysis ☐ Identification Team
1. Issue(s)	
141B. Radiation - residual activity	
143. Radiation - storage and handling of radioactive materials	
Focus group	☐ Occupational Safety
☐ Environmental Protection ☐ Management & Ov	versight 🛮 Radiation Protection
O le there a passencery standard which applies to this issue	1102 Fly50 Fly61
2. Is there a necessary standard which applies to this issu	ue?   ✓ YES □ NO
	If yes, continue; otherwise skip to 6.
3. Necessary standard(s)	,
10 CFR 835.601-603	
10 CFR 835.501-502	1
10 CFR 835 Appendix B	
10 CFR 835 Appendix C	
	į
	· ·
	•
<del></del>	
4. Are there any aspects of these necessary standard(s) w	hich do not add value? 🔲 YES 🛛 NO
	If yes, continue; otherwise skip to 6.
	, , , , , , , , , , , , , , , , , , , ,
5. Description of non-value added aspects of necessary	standard(s).
	·
	· · · · · · · · · · · · · · · · · · ·
6. Is the level of risk associated with the issue(s) consist	ent with management
performance goals assuming compliance with applicable no	
	If no continue; otherwise skip to 12.
	ii no commue, otherwise skip to 12.
7. Is there a non-required external standard which applies	to this issue?
	If yes, continue; otherwise skip to 10.

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with	YES NO
management performance goals assuming compliance with the above (non-statutory) external standard?	
(non-statutory) external standard:	continue; otherwise skip to 12
10. Is an internal standard required to attain a level of risk consistent	t with   ☑ YES □ NO
management performance goals?	
11. Describe nature and status of internal sufficient standard.	
Fermilab Radiological Control Manual Article 411.	
DOE has approved Fermilab criteria for the release of material which is determined to b	
needed to augment the cited regulatory requirements which do not embody such releas incorporated into Article 411 of the Fermilab Radiological Control Manual and thus exist	
incorporated into Article 411 of the Ferninas Hadiological Control Mandal and Thus exist	o as an mema standard.
12. Describe how the levels of risk and cost are consistent with man	agement performance goals.
The standards cited above, including the internal standard, provide a necessary and s	ufficient level of control of
radioactive materials. Specifically, a net gain in cost-effectiveness is gained if the con-	
Management Area (RMMA), nowhere defined in regulations, is eliminated. At Fermilab R types of radiological areas defined by 10 CFR 835. The corresponding Fermilab policies	
elimination will improve cost-effectiveness and simplify the radiological control program	
g	
S Maior months	
13. Pick the basic implementing assumption from the list. Major position of the list. Major position of the list.	ive impact
□ No net impa	
14. Describe the nature and status of implementation including cost	t-effectiveness.
The program to implement these standards is presently in place as expressed in the Fer	
A major improvement in cost-effectiveness can be realized by implementing the actions	
standard is approved in the N&S process, internal implementation programs may be mo-	dified to be compatible with this
standard.	
	•

1.	issue(s)	Iss	ue origin	Hazard analysis	☐ Identification Team
		C amuliament			
44	4. Thermal - battery bank and UP	S equipment			
Ь					
	Focus group	/ Management	ion	☑ Occupational	Safety
	☐ Environme	ntal Protection	nt & Oversig	ht 🔲 Radiation Prot	tection
2.	Is there a necessary star	dard which applies to thi	s issue?		M VEC EINO
	,	подражения при под под под под под под под под под под			¥ YES □ NO
			If	yes, continue; o	otherwise skip to 6.
_					
3.	Necessary standard(s)				
29 (	CFR 1910.178(g)				
İ					
4.	Are there any aspects of	these necessary standard	(s) which	do not add value	e? YES X NO
			l:	f yes, continue;	otherwise skip to 6.
					•
5.	Description of non-value	added aspects of necess	sarv stand	ard(e)	
<del></del>					
			<del></del>		
_	In the level of rick secre	isted with the issue(s)			
٥. ممط	Is the level of risk assoc	compliance with englicat	nsistent w	vitin management	X YES NO
hell	formance goals assuming	compliance with applicat		-	
				If no continue; o	therwise skip to 12.
7.	Is there a non-required ex	ternal standard which an	nlies to th	ie ieeuo?	T VEC TINO
•	a nen required of	app			YES NO
			11	yes, continue; of	therwise skip to 10.

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with	YES NO
management performance goals assuming compliance with the above (non-statutory) external standard?	
(non-statutory) external standard:	otherwise skip to 12.
10. Is an internal standard required to attain a level of risk consistent with	
10. Is an internal standard required to attain a level of risk consistent with management performance goals?	YES NO
11. Describe nature and status of internal sufficient standard.	
11. Describe nature and status of internal sufficient standard.	
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	·
40. Describe have the levels of viet and east are consistent with monogramment	formonos acolo
12. Describe how the levels of risk and cost are consistent with management p Past adherance to the statutory requirements in #3 has resulted in levels of ES&H and cost perform	
with management goals including the use of industrial standards for industrial hazards. The assoc	
proper segregation, clearences, and training.	
13. Pick the basic implementing assumption from the list. Major positive impact	☐ Minor negative impact
☐ Minor positive impact	Major negative impact
No net impact	
14. Describe the nature and status of implementation including cost-effectiven	iess.
Segregated work areas for battery storage have been addressed at the Laboratory. Battery changi but through supervisory training well addressed. Experience has demonstrated that this program is cost-effective.	ng hazards is infrequent
	.
	1

1.	Issue(s)		Issue	origin 🔯	Hazard analysis	☐ Identification Team
	i. Thermal - cold work	environments				
170	. Thermal-cold work	CHANGINACARG				
ŀ						
	Focus group	mergency Managemen	t □ Fire Protection		Occupational S	Safety
•		Environmental Protection		Oversight [	Radiation Prote	ection
	<del></del>					
2.	Is there a necess	ary standard which	applies to this is	sue?		X YES NO
				lf ve	s. continue: o	therwise skip to 6.
				•		
3.	Necessary stand	ard(s)				
				·		
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L	· · · · · · · · · · · · · · · · · · ·			<del>.</del>		
_						
4.	Are there any asp	pects of these nece	ssary standard(s)			
				it ye	es, continue; d	otherwise skip to 6.
E	Description of no	an value added con	acts of management		(a)	
<u>5.</u>	Description of no	on-value added asp	ects of necessary	Standard	(S).	
٠						
					<del></del>	
_						
		sk associated with t ssuming compliance				X YES NO
heli	. or munice goals as	Joanning Compliance	. with applicable	-		
				иг	io continue; O	therwise skip to 12.
_	In these					
7.	is there a non-rec	quired external stan	dard which applies			☐ YES ☐ NO
				if yes	i, continue; ot	herwise skip to 10.

8. External sufficient standard citation		
ACGIH TLV for cold stress		
	<del></del>	
9. Is the level of risk associated with the issue(s) consistent		☐ YES ☐ NO
management performance goals assuming compliance with the (non-statutory) external standard?		
(non statutery) oxionial statical.	ir no continue;	otherwise skip to 12
10. Is an internal standard required to attain a level of risk of management performance goals?	onsistent with	YES NO
management performance goulo.		
11. Describe nature and status of internal sufficient standard	d.	
		· ·
12. Describe how the levels of risk and cost are consistent v	with management	nerformance doals
Past adherance to the standard in #8 has resulted in levels of ES&H and cos		
management goals inlouding the use of industrial standards for industrial issu		
cases of cold injury at Fermilab, winter exposures to are fairly commonplace. serves as the generally-recognized consensus standard for industrial hygien		
requirement.	e nazarus wilicii uo n	of nave a statutory
13. Pick the basic implementing assumption from the list. $oxedsymbol{\square}$	Aajor positive impact	☐ Minor negative impact
. I N	/linor positive impact	☐ Major negative impact
<u> 4 🖾</u>	lo net impact	
44 Banadha tha natana and atal a af the latest the same		
14. Describe the nature and status of implementation included Past application of the ACGIH TLV for cold stress has proven to be both such as a proven to be both such as a proven to be both.		
rast application of the Acain TEV for cold stress has proven to be both suc	Juessiul aliu cost-elle(	Juve.
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1.	Issue(s)	Issue origin 🛮 Hazard analysi	s Identification Team
	. Thermal - cryo	gens	
	,	•	
	Focus group	☐ Emergency Management ☐ Fire Protection ☑ Occupational ☐ Environmental Protection ☐ Management & Oversight ☐ Radiation Protection	Safety
2.	Is there a ne	cessary standard which applies to this issue?	YES X NO
		If yes, continue;	otherwise skip to 6.
3.	Necessary s	tondord/ol	
<u>з.</u>	Mecessary s	tanuaru(s)	
L			
4.	Are there any	aspects of these necessary standard(s) which do not add value	
	•	ir yes, continue;	otherwise skip to 6.
5.	Description of	of non-value added aspects of necessary standard(s).	
		,	
	-		
6.	is the level of	of risk associated with the issue(s) consistent with management	
		s assuming compliance with applicable necessary standards?	YES NO
		If no continue;	otherwise skip to 12.
7.	Is there a no	n-required external standard which applies to this issue?	YES X NO
		If yes, continue; o	otherwise skip to 10.

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with	F3/50 F3/6
management performance goals assuming compliance with the above	YES NO
(non-statutory) external standard? If no continue; oth	erwise skin to 12
ii iio commuo, cm	cimice only to 12.
10. Is an internal standard required to attain a level of risk consistent with	X YES NO
management performance goals?	
11. Describe nature and status of internal sufficient standard.	ě
Fermilab ES&H Manual chapters 5032 and 5032.1, Cryogenic System Review and Liquid Nitrogen Dew	ar Installation,
respectively, are written and have been in force for several years. It was developed to specifically add	dress the cryogenic
hazards at Fermilab and to minimize the potential risks.	
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12. Describe how the levels of risk and cost are consistent with management perf	ormance goals.
Past adherance to the internal standard in #11 has resulted in levels of ES&H and cost performance the	
management goals. There have been very few, if any, injuries or illnesses stemming from activities falli	ng under the scope
of Fermilab's cryogenic system review program since its initiation.	
13. Pick the basic implementing assumption from the list. Major positive impact	dinor negative impact
Minor positive impact	//ajor negative impact
No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No	
14. Describe the nature and status of implementation including cost-effectivenes	s.
The internal standards identified in #11 have proven to be both successful and cost-effective.	
,	

If yes, continue; otherwise skip to 10.

						issue	origin	X F	lazard analy	/sis 🔲 l	dentification Team
1.	Issue(s)									-	
147	'. Thermal - high t	temperatu	ire equipmer	nt							
	Focus group	☐ Eme	gency Mana	nement	☐ Fire I	Protection		N N	Occupation	al Safet	· · · · · · · · · · · · · · · · · · ·
	, oodo: g.oup		onmental P				Oversia	ht □	Radiation F	rotection	y 1
											·
2.	Is there a ne	reesarv	standard	which	annlies	to this is	seus?				ELVED FINE
<b>~</b> ·	is there a ne	ocoour y	Standard	Willon	applies	to tills is		_			YES NO
							If	yes	, continue	; other	wise skip to 6.
3.	Necessary s	*ondord	(a)								
			(5)							. ,	
	CFR 1910.107(c)( CFR 1910.303(b)(										
	CFR 1910.305(j)(4										
	CFR 1910.307	-/(/									
29 (	CFR 1910.335(a)(	(2)(ii)								•	
											į
4.	Are there any	y aspect	s of these	e neces	sary sta	ındard(s)	which	do r	not add va	ilue?	☐ YES 🔀 NO
							i	f yes	s, continue	e; other	wise skip to 6.
					•						,
5.	Description of	of non-v	alue adde	d aspe	cts of ı	necessary	/ stand	lard(s	s).		
	·										
	•										
									<del></del>		
6.	is the level o	of risk a	ssociated	with th	ne issue	(s) consi	stent w	vith :	manageme	nt	
per	formance goal	ls assui	ning com	pliance	with ap	plicable	necess	sary	standards	?	YES NO
								If no	continue	; otherv	wise skip to 12.
7.	Is there a no	n-requir	ed externa	l stand	ard whi	ch annlis	e to th	nie in	2010		MYEA MYA
• •	u 1101	oquii	CALCING	. Juniu	wid 971111	appile	3 W III	110 15	out:		☐ YES ☐ NO

8. External sufficient standard citation		
9. Is the level of risk associated with the issue(s) consis	tent with	YES NO
management performance goals assuming compliance with		<u> </u>
(non-statutory) external standard?	If no continue;	otherwise skip to 12.
10. Is an internal standard required to attain a level of ri	sk consistent with	☐ YES ☐ NO
management performance goals?		
11. Describe nature and status of internal sufficient star	dard.	
12. Describe how the levels of risk and cost are consiste		
Past adherance to the statutory requirements in #3 has resulted in level with management goals inlouding the use of industrial standards for industrial standards for industrial standards.		
proper covering, clearences, and training.	iomai iodado. Tiro adodona	lou program molados
13. Pick the basic implementing assumption from the list	☐ Major positive impact	☐ Minor negative impact
Total Tion, the Buote Implementing accumplication from the	Minor positive impact	☐ Major negative impact
	No net impact	
14. Describe the nature and status of implementation in	icluding cost-offective	nace
High temperature equipment exists periodically and well address through		
pesonnel with the proper person protective equipment and training. Exp		
successful and cost-effective.		ļ
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1.	Issue(s)
	Thermal - hot work environments
1	
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l	
F	ocus group
	☐ Environmental Protection ☐ Management & Oversight ☐ Radiation Protection
2.	Is there a necessary standard which applies to this issue?   ☑ YES ☐ NO
	If yes, continue; otherwise skip to 6.
3.	Necessary standard(s)
	·
4	Are there any concete of these response standard(s) which do not add value.
4.	Are there any aspects of these necessary standard(s) which do not add value? YES X NO  If yes, continue; otherwise skip to 6.
	ii yes, continue, otherwise skip to 6.
5.	Description of non-value added aspects of necessary standard(s).
	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
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6	s the level of risk associated with the issue(s) consistent with management
o. perf	prmance goals assuming compliance with applicable necessary standards?
•	If no continue; otherwise skip to 12.
	" no continue, emerated and to 12.
7.	s there a non-required external standard which applies to this issue?
- •	s there a non-required external standard which applies to this issue?   If yes, continue; otherwise skip to 10.
	ii joo, continue, cineratae akip to to.

8. External sufficient standard citation		
ACGIH TLV for heat stress		
	·····	
9. Is the level of risk associated with the issue(s) consistent		YES NO
management performance goals assuming compliance with the		
(non-statutory) external standard?	If no continue;	otherwise skip to 12
10. Is an internal standard required to attain a level of risk c	onsistent with	☐ YES ☐ NO
management performance goals?		<u> </u>
11. Describe nature and status of internal sufficient standard	d.	
THE BOOKING HARAITO WHA CHARACTER IN COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISSION COMMISS		
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12. Describe how the levels of risk and cost are consistent v	with management	performance goals.
Past adherance to the standard in #8 has resulted in levels of ES&H and cost	•	e consistent with
management goals inlouding the use of industrial standards for industrial issu	ues.	
•		
13. Pick the basic implementing assumption from the list.	Major positive impact	☐ Minor negative impact
	ninor positive impact	☐ Major negative impact
	lo net impact	
14. Describe the nature and status of implementation include		
Past application of the ACGIH TLV for heat stress has proven to be both suc	ccessful and cost-effe	ective.

1.	Issue(s)				Issue	origin	Hazard analy	sis 🔀 lo	lentification Team
	. Emergency pre	naredness - se	were weather						
	. Construction - h		vere weather						
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Щ									
ı	Focus group					_	☐ Occupation	al Safety	
		☐ Environme	ntal Protection	☐ Manage	ment &	Oversig	ht 🔲 Radiation P	rotection	
2.	Is there a ne	cessary star	dard which	applies to	this is	sue?			☐ YES 🗷 NO
						If	yes, continue	otherv	
•						••	yes, continue	Otherv	vise skip to 6.
3.	Necessary st	tandard(s)							
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4.	Are there any	aspects of	these neces	ssary stand	lard(s)		do not add va		☐ YES ☐ NO
						I	f yes, continue	; other	wise skip to 6.
5.	Description o	f non-value	added aspe	ects of neo	essary	stand	lard(s).		
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							vith managemer		T VEC RIVO
perf	ormance goals	s assuming	compliance	with appli	icable	necess	sary standards	?	YES X NO
							If no continue;	otherw	rise skip to 12.
									<del>-</del>
7.	ls there a nor	n-required ex	rtarnal etand	lard which	annlice	s to th	nie ieeuc?		TVEC BING
••	is there a nor	ricquired e		uru Wincii	applies			ath	YES NO
						11	yes, continue;	ornerw	ise skip to 10.

8. External sufficient standard citation		
9. Is the level of risk associated with the issue(s		YES NO
management performance goals assuming compliar (non-statutory) external standard?		
(non statutery) saternar standard.	If no continue; other	wise skip to 12
10. Is an internal standard required to attain a lev	vel of risk consistent with	
management performance goals?		YES NO
11. Describe nature and status of internal suffici	ent standard.	
Fermilab Emergency Plan Sections 35A, 35B, and 41.		
<ol> <li>Personnel Warning - Severe weather Fermilab Emergen</li> <li>Shelters - Severe weather Fermilab Emergency Plan, 9/</li> </ol>		
3.) Warning Signals - Severe weather Fermilab Emergence		
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12. Describe how the levels of risk and cost are		
Fermilab's policy to ensure a safe environment for workers inc weather. For Fermilab's geographic location the primary sever		
and winter storms. Although the chances for tornado - the mos		
pobability is low; there has never been a tornado on site, thoug Illinois in the 10 year period 1976 and 1985.	n there were 10 tornados reported in the Fe	rmilab area of
lillinois in the 10 year period 1970 and 1965.		İ
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	· · · · · · · · · · · · · · · · · · ·	
13. Pick the basic implementing assumption from	the list Major positive impact  Mir	or negative impact
13. Pick the basic implementing assumption from	☐ Minor positive impact ☐ Ma	jor negative impact
	No net impact     ■	
14. Describe the nature and status of implement	tation including cost-effectiveness.	
It is a common best business practice fo prepare for weather re	elated emergencies that may affect peronne	
provided outside tornado warning devices (sirens) which are be (SEWS) which functions inside facilities throughout the site wh		
The present program will continue to be implemented, upon ap		
documented in the Fermilab Emergency Plan.		
		]

If yes, continue; otherwise skip to 10.

			Issue	origin 🔲 Ha	zard analysi	is 🛮 Identification Team
1.	Issue(s)					
153	. Emergency pr	eparedness - safeguards and secu	rity			
						·
			<del></del>			
	Focus group				Occupationa	l Safety
		☐ Environmental Protection ☐ N	/lanagement &	Oversight	Radiation Pro	otection
2.	Is there a ne	cessary standard which appl	es to this is	sue?		¥YES □ NO
				If yes,	continue;	otherwise skip to 6.
						•
3.	Necessary s	tandard(s)				
		pass to land owned & leased by the				
		ns 841-848 (Use, or threat of use, o B, App A, Chpt X, Paragraphs H thi			sorders.)	4
		utes (ICS) Chapter 625 (State vehi		) <b>.</b>		
		() eap.o. 020 (e.a.o 10				
	•					
•						
4.	Are there any	aspects of these necessary	standard(s)	which do no	ot add valu	ue? YES NO
		•				otherwise skip to 6.
						•
5.	Description of	f non-value added aspects	of necessary	standard(s)	)_	
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						·
		r				
	1. 1b. 1			,	=	
6.		f risk associated with the is s assuming compliance with				YES NO
hei	iormance goal	s assuming compliance will	applicable	-		
				if no	continue;	otherwise skip to 12.
_						
7.	Is there a no	n-required external standard	which applies	s to this iss	sue?	☐ YES ☐ NO

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with	YES NO
management performance goals assuming compliance with the above (non-statutory) external standard?	
(non-statutory) external standard?  If no continue; other	rwise skip to 12.
10. Is an internal standard required to attain a level of risk consistent with	
management performance goals?	☐ YES ☐ NO
11. Describe nature and status of internal sufficient standard.	
	]
12. Describe how the levels of risk and cost are consistent with management perfo	rmance goals.
Adherence to the cited legal requirements is sufficient in achieving a low level of risk that is consistent with performance goals. The level of risk is consistent with management performance goals because management.	
use industrial solutions for industrial issues. This is an industrial issue and the solution chosen is an ind	
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13. Pick the basic implementing assumption from the list. Major positive impact Min Minor positive impact Minor positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Major positive impact Majo	nor negative impact
No net impact     ■     No net impact     ■     No net impact     ■     No net impact     ■     No net impact     ■     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net impact     No net im	
14 Describe the nature and status of implementation including and effectiveness	
14. Describe the nature and status of implementation including cost-effectiveness.  No changes are anticipated in the emergency preparedness/response aspects of the safeguards and see	
presently implemented at Fermilab; this includes the following elements: the Site Security Plan; the (an	nual) Risk
Assessments; the Fermilab Security Procedures; and employee identification badging. When the above approved in the N&S process, internal implementation programs may be modified to be compatible with the	
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1.	Issue(s)	<b>Issue origin</b> ☐ Hazard analysis	Identification Team
		preparedness - generic	
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	Focus group	☑ Emergency Management    ☐ Fire Protection    ☐ Occupational	Cofoto
•	rocus group		tection
2.	is there a n	necessary standard which applies to this issue?	X YES NO
		If yes, continue;	otherwise skip to 6.
3.	Necessary	standard(s)	
		mployee emergency plans and fire prevention plans.	
40 C	FR 300.150 (EF	PA)	
	FR 311.1 Work 12356 of Aug.		
Title	5 U.S.Code 41	103.	
28 C	FR 36 Sections	s 4.1.3 (9) and 302(b)(2).	
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			}
4.	Are there an	ny aspects of these necessary standard(s) which do not add valu	e? YES NO
			otherwise skip to 6.
5.	Description	of non-value added aspects of necessary standard(s).	
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	· · · · · · · · · · · · · · · · · · ·		
6.	Is the level	of risk associated with the issue(s) consistent with management	
perf	ormance goa	als assuming compliance with applicable necessary standards?	YES X NO
		If no continue;	otherwise skip to 12.
			•
7.	is there a no	on-required external standard which applies to this issue?	YES NO
		If yes, continue; o	therwise skip to 10.

8. External sufficient standard citation	
NFPA 1561, Standard of Fire Dept. Incident Management System	
9. Is the level of risk associated with the issue(s) consistent with	RIVEO ELIO
management performance goals assuming compliance with the above	YES INO
(non-statutory) external standard?	wise skip to 12
40. to an internal standard vaccinal to attain a level of viet consistent with	
10. Is an internal standard required to attain a level of risk consistent with management performance goals?	☐ YES ☐ NO
management performance godio.	
11. Describe nature and status of internal sufficient standard.	
	[
12. Describe how the levels of risk and cost are consistent with management perform	
Adherence to the cited legal requirements and external standards is sufficient in achieving a low level of ri consistent with management performance goals. Adoption of NFPA 1561 is triggered by the Fermilab man	
to utilize an in-house Fire Dept. The level of risk is consistent with management performance goals because	
expects to use industrial solutions for industrial issues. This is an industrial issue and the solution choser	
solution.	
	,
13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Min	or negative impact
☐ Minor positive impact ☐ Maj	or negative impact
M No het impact	
14. Describe the nature and status of implementation including cost official	
14. Describe the nature and status of implementation including cost-effectiveness.	moradness and
Fermilab's present extensive emergency management system includes hazard assessment, planning, pre response; an Incident Command System. It is documented in the Fermilab Emergency Plan. When the ab	
approved in the N&S process, internal implementation programs may be modified to be compatible with this	
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1.	Issue(s)					Issue	origin	☐ Hazard analy	/sis 🔀	Identification Team
	. Env - undergi	round stora	ge tanks							1
	J		-							
	**									
	Focus group	□ Emerc	ency Manag	ement [	7 Fire Pro	tection		☐ Occupation	nal Safa	tv
	ocus, group						Oversig	ht Radiation I		
2.	Is there a n	ecessarv	standard v	vhich ap	plies to	this is	ssue?			X YES NO
		,			•			ves continue	· othe	rwise skip to 6.
								yes, continue	, otile	mise skip to 0.
3.	Necessary :	standard(	s)						•	
RCF	RA, 42 USC 690	1 et seq.								
	FR 280									
	AC 731 - 732 AC 170									
	AC 170 Subpart	t A								
	•									
ļ										
4.	Are there an	y aspects	of these	necessa	ry stand	lard(s)	which	do not add v	alue?	YES NO
							ı	f yes, continu	e; othe	erwise skip to 6.
5.	Description	of non-va	lue added	aspect	s of nec	essary	/ stand	lard(s).		
										ŀ
							•			
6.								vith manageme		N VEC EINO
per	formance goa	als assun	ing comp	liance w	ith appl	icable	neces	sary standards	?	X YES NO
								If no continue	; othe	rwise skip to 12.
7.	Is there a ne	on-require	d external	standar	d which	applie	s to th	nis issue?		YES NO
							lf	yes, continue	; other	wise skip to 10.

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with	YES NO
management performance goals assuming compliance with the above (non-statutory) external standard?	
(non-statutory) external standard? If no continue; othe	rwise skip to 12
10. Is an internal standard required to attain a level of risk consistent with management performance goals?	YES NO
management performance goaler	
11. Describe nature and status of internal sufficient standard.	
	•
	· · · · · · · · · · · · · · · · · · ·
12. Describe how the levels of risk and cost are consistent with management perfo	rmance goals.
Continuation of the current program will provide an appropriate level of protection at an acceptable cost.	The level of risk is
consistent with management performance goals because management expects to use industrial solution ssues. This is an industrial issue and the solution chosen is an industrial solution.	ns for industrial
ssues. This is all industrial issue and the solution chosen is an industrial solution.	
	•
13. Pick the basic implementing assumption from the list. ☐ Major positive impact ☐ Mi	nor negative impact
☐ Minor positive impact ☐ Ma  ☑ No net impact	ajor negative impact
No net impact	
14. Describe the nature and status of implementation including cost-effectiveness	
The statutory requirements identified in #3 have proven to be both successful and cost-effective.	

1. Issue(s)	Issue origin  Hazard analysis  Identification Team
	nical hazards - aviation
Too. Galor moorita	indi indiana di dinana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di manana di
14.4	
Focus group	☐ Emergency Management ☐ Fire Protection ☑ Occupational Safety
	☐ Environmental Protection ☐ Management & Oversight ☐ Radiation Protection
2. Is there a n	ecessary standard which applies to this issue?
	If yes, continue; otherwise skip to 6.
	ii you, continue, otherwise skip to 0.
3. Necessary	standard(s)
	operating and flight rules)
	ion of certain aircraft operations from the transponder)
14 CFR 830 (Notific	ation and reportingaccidents and incidents)
14 CFR 135 (Air tax	i operators and commercial operators)
]	
4. Are there an	y aspects of these necessary standard(s) which do not add value? 🔲 YES 🔀 NO
	If yes, continue; otherwise skip to 6.
5. Description	of non-value added aspects of necessary standard(s).
6. Is the level	of risk associated with the issue(s) consistent with management
	ils assuming compliance with applicable necessary standards?
	If no continue; otherwise skip to 12.
	ii no continue; otherwise skip to 12.
7. Is there a no	on-required external standard which applies to this issue?
	If yes, continue; otherwise skip to 10.

8. External sufficient standard citation	
9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above	YES NO
to to the many contract of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the standard of the	; otherwise skip to 12.
	•
10. Is an internal standard required to attain a level of risk consistent with	YES NO
management performance goals?	
11. Describe nature and status of internal sufficient standard.	
	,
12. Describe how the levels of risk and cost are consistent with management	
Past adherance to the statutory requirements in #3 has resulted in levels of ES&H and cost perfo with management goals inlouding the use of industrial standards for industrial issues. Given the le	
aircraft service usage (~few days per year) and small number of employees involved (~one per fli	ght), it is reasonable for
Fermilab to accept the cumulative level of risk associated with "industrial standards" (i.e., FAA co	mpliance).
(SFAR = Special Federal Aviation Regulations)	
	·
	]
13. Pick the basic implementing assumption from the list. Major positive impact	☐ Minor negative impact
Minor positive impact ☐ No net impact	☐ Major negative impact
14. Describe the nature and status of implementation including cost-effective	
Reliance on FAA requirements would greatly simplify the process for securing aircraft services. T non-negligible time savings for all personnel involved in the procurement and approval process.	
demonstrated that this program is both successful and cost-effective.	·

		Issue origin 🔲 Hazard analysis 🔀 Id	entification Team
1.	issue(s)		Cikincation realit
159	. Emergency pre	eparedness - hazardous materials	
1			
1			
F	Focus group		
		☐ Environmental Protection ☐ Management & Oversight ☐ Radiation Protection	
2.	is there a ne	ecessary standard which applies to this issue?	X YES NO
		If yes, continue; otherw	ise skip to 6.
3.	Necessary s		
		)(2) Elements of an Emergency Response Plan ety Act (as ammended by P.A. 85-1325, effective August 31, 1988)	
Innic	ns Chemical Sai	ety Act (as affilinenced by P.A. 85-1325, effective August 31, 1988)	
ļ			-
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Щ.			
4.	Are there any	/ aspects of these necessary standard(s) which do not add value?	YES NO
		If yes, continue; others	wise skip to 6.
5. 	Description o	of non-value added aspects of necessary standard(s).	
İ			
1			
			•
6.	Is the level o	of risk associated with the issue(s) consistent with management	
perf	ormance goal	s assuming compliance with applicable necessary standards?	YES NO
		If no continue; otherw	ise skip to 12.
			-
7.	Is there a no	n-required external standard which applies to this issue?	YES NO
-		If we continue otherwi	